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International application number: PCT/US04/040503

International filing date: 03 December 2004 (03.12.2004)

Document type: Certified copy of priority document

Document details: Country/Office: US
Number: 60/526,592
Filing date: 04 December 2003 (04.12.2003)

Date of receipt at the International Bureau: 10 January 2005 (10.01.2005)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



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APPLICATION NUMBER: 60/526,592

FILING DATE: *December 04, 2003*

RELATED PCT APPLICATION NUMBER: *PCT/US04/40503*

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a requirement for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

INVENTOR(S)					
Given Name (first and middle (if any))		Family Name or Surname		Residence (City and either State or Foreign Country)	
David		Dise		Richmond, Virginia	
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
WRIST AND FOREARM TRAINING GUIDE					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
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OR		Type Customer Number here			
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification		Number of Pages	2	<input type="checkbox"/> CD(s), Number	
<input checked="" type="checkbox"/> Drawing(s)		Number of Sheets	2	<input type="checkbox"/> Other (specify)	
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.				FILING FEE AMOUNT (\$)	
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees				80.00	
<input checked="" type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number		50-2041			
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

Respectfully submitted

SIGNATURE

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12/4/03

REGISTRATION NO.

32,635

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07880008PR

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P19SMALL/REV05

Wrist and Forearm Training Aid

Up until now, the point at which I invented and designed this wrist and forearm attachment / training aid, people used to exercise their wrists, hands, forearms and rotator cuff / shoulder stability using a variety of equipment. This one piece of equipment can be attached to a resistance machine, cable or elastic band, to allow a person to exercise all of the above, but mainly the 6 functions of the wrist, elbow and forearm. The ideal form of resistance to attach the 6 way wrist / elbow / forearm handle to, is a pulley system or an adjustable pulley system such as a cable cross machine found in almost all fitness facilities and rehab centers. The cables that go through the pulleys are then attached to weights or some other type of resistance. Rubber tubing with a clip at one end and the other end being able to be secured, will also suffice as a form of resistance for the 6 way wrist / elbow / forearm developer.

The handle or 6 way developer that I invented was created from years of training athletes that require strong hands, wrists and forearms, such as golfers, fighters, tennis players, baseball and softball players and many others. I have also used this handle to assist in elbow and shoulder rehab. There are many exercises that can be performed by attaching this invention to a form of resistance, but mainly it thoroughly stretches and strengthens the 6 primary functions of the wrist, elbow and forearm.

- (1) Wrist Flexion (2) Wrist Extension (3) Radial Flexion (4) Ulnar Flexion (5) Wrist / Elbow Supination (6) Wrist / Elbow Pronation. (Pictures will accompany filing)

The shoulder / rotator cuff exercises are (1) Shoulder Internal Rotation (2) Shoulder External Rotation (3) Shoulder Horizontal Internal Rotation (4) Shoulder Horizontal External Rotation.

With being involved full time and owning multiple training facilities for over 20 years, I have never seen or heard of one piece that can exercise all of the fore mentioned functions properly or at all.

This technology can be listed as revolutionary for many uses / reasons:

Enhances physical efficiency, prevention of injuries, warm-up, rehab of wrist, rehab of elbow and rehab of shoulder. A person can purchase one for their personal use or to keep with them in their gym bag. Facilities can purchase one or more to have with their other attachments and handles used for all exercise previously listed.

This attachment or handle must have at least the following features in order to effectively perform all of the wrist-forearm-elbow and shoulder exercises:

- (1) Handle length of at least 6 inches or more, longer than traditional handles, which is necessary for the Radial flexion and Ulnar flexion exercises.
- (2) The handle must be able to spin freely with minimal resistance. (see Fig. 1)
- (3) The circumference of the handle will come in at least 3 sizes youth, sm-med and lg-xl. (see Fig. 2)

- (4) The handle must be able to be attached at each end and the cord or strap that attaches at each end must then connect and be able to be attached to the resistance piece. (see Fig. 3)
- (5) The strap with connections (grommets) at two points going into one, should be made in different lengths, in order to prevent discomfort from the strap rubbing against the user. Function may also be affected by the length. (see Fig. 4)
- (6) The handle must have at least a fixed eye loop and may use a spinning eye loop connected to at least one end of the handle. This is critical and what makes this invention novel. An eye loop can be fixed at both ends, but it is not necessary, for the 6 critical wrist / elbow / forearm functions to be performed. The eye at each end may spin or be fixed or both. (see Fig. 5)
- (7) There will be several different hand circumference designs, but the novel design will have grooved finger positions to allow different hand positions and assist when the user is not strong enough to perform certain exercises. This design also allows for those same users to be able to quantify gains by starting with the same grip position and then advancing to the next grip position. (see Fig. 6)
- (8) The handles will also be made so that the (Y) strap is not needed to be attached, the handle will come with it permanently attached and the grommet at the end of the strap can be attached to the resistance source or machine as in Figure 3.
- (9) The straps pictured in Figure 4, can be sold separately due to wear and usage. This is the main benefit to the strap in Figure 4 that should be clipped to the handle vs. the handle pictured in Figure 3, with the ends of the handles already connected to the two strap ends.
- (10) The unit will also be designed to be able to spin end over end by itself or through the use of the spinning (Y) strap shown in Fig. 4 B. (see Fig. 7)
- (11) The handle can be manufactured much cheaper and have the basic functions of spinning and have at least one attached eye loop for the radial / ulnar flexion, by allowing a strap to run through the center of the handle and have a grommet at the end of the strap as in (Fig. 8).

Included with these explanations are drawings representing all Figures mentioned, as well as photographs of the 6 wrist / elbow / forearm drills, along with photographs of the shoulder drills. The photographs display the function of a fixed eye loop on a handle and one resistance source.

With reference to Figure 4, you can add an attachable strap with pulleys or swivels that could be attached to a real club, bat or racket.

Fig. 1

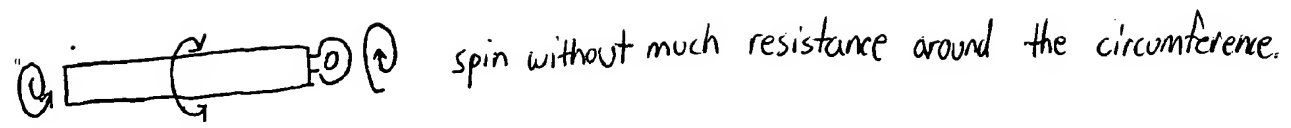


Fig. 2

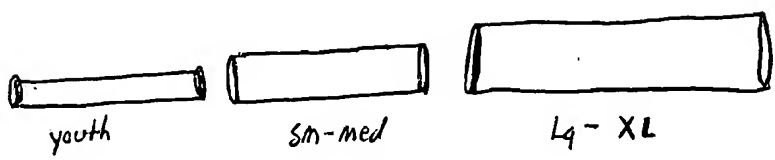
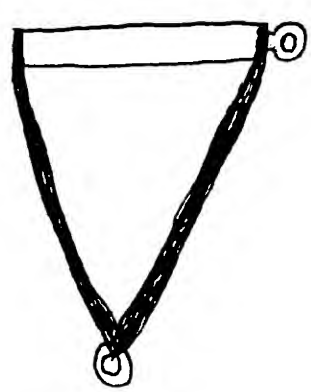


Fig. 3



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Fig. 4

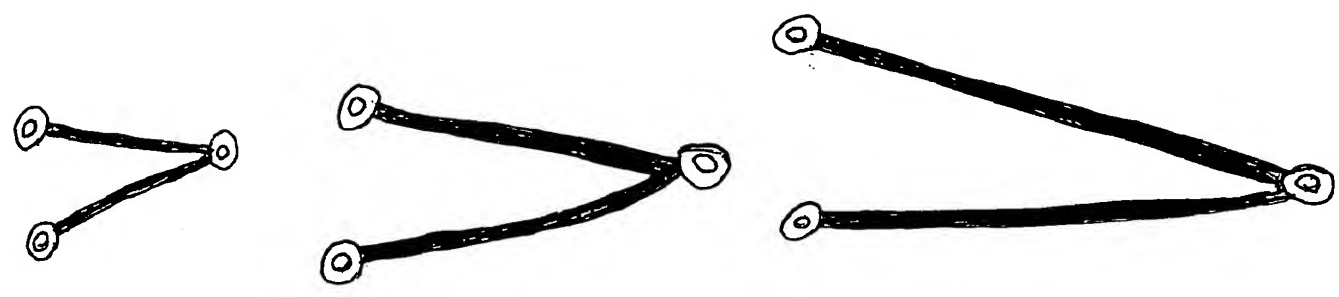


Fig. 4B



↑
spinning joint that allows grammet or eye loop to spin freely.

Fig. 5



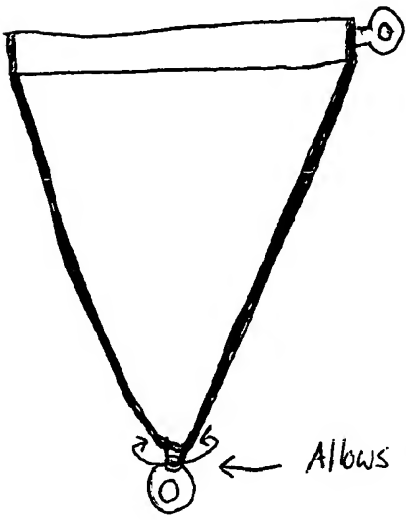
Spinning Eye Loops + Handle Spinning.
Eye loops can spin independently of handle.

Fig. 6



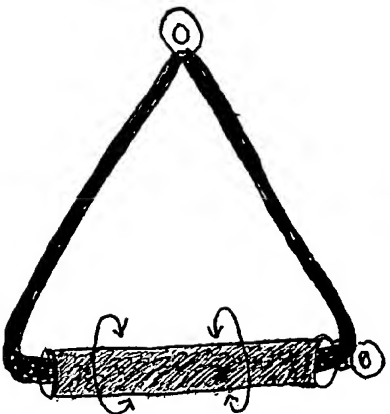
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Fig. 7

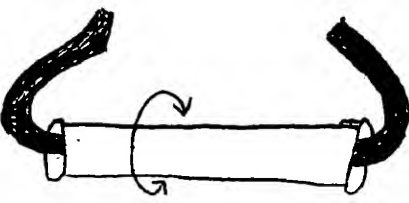


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Fig. 8



Handle can spin around strap



Handle without eye loop to
better picture spinning around strap.